

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,871	10/717,871 11/19/2003		Hiroshi Suzuki	3679.002ADIV 9347	9347
24040	7590	02/17/2006	EXAMINER		
DENNIS (G. LAPOI	NTE	SELLERS, ROBERT E		
	LAPOINTE LAW GROUP, PL PO BOX 1294				PAPER NUMBER
TARPON S	PRINGS,	FL 34688-1294	1712		

DATE MAILED: 02/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)					
		10/717,871	SUZUKI ET AL.					
	Office Action Summary	Examiner	Art Unit					
		Robert Sellers	1712					
	The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address					
Period fo	·	LO CET TO EVEIDE AMONTUL	C) OD THIDTY (00) DAYO					
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE asions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be time rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status								
1)🖂	Responsive to communication(s) filed on 03 Ja	nuary 2006.						
2a) <u></u> ☐	This action is FINAL . 2b) ☑ This action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
,—	4) Claim(s) 6-18 is/are pending in the application. 4a) Of the above claim(s) 10-18 is/are withdrawn from consideration.							
'=	5) Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>6-9</u> is/are rejected.							
·	Claim(s) is/are rejected. Claim(s) is/are objected to.							
· · · · · · · · · · · · · · · · · · ·	Claim(s) are subject to restriction and/or	election requirement.						
Applicati	on Papers							
_	The specification is objected to by the Examine	•						
	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
•	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority L	ınder 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.								
	the attached detailed office action for a list	or the certified copies flot receive	u.					
Attachmen	t(s)							
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da						
3) 🛛 Inforr	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date 11/19/2003		Patent Application (PTO-152)					

Application/Control Number: 10/717,871 Page 2

Art Unit: 1712

1. The election with traverse of Group I in the reply filed on January 3, 2006 is acknowledged. The traversal is on the ground that a requirement for restriction is. This is not found persuasive because the separate classifications of the inventions requires numerous searches which is burdensome.

The requirement is still deemed proper and is therefore made FINAL.

Claims 10-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the election of species requirement in the reply filed on January 3, 2006.

- 2. The specification on page 1 referring to the preliminary amendment filed November 19, 2003 on line 2, after "June 23, 1999" should update the status of parent divisional application no. 09/331,829 as U.S. Patent No. 6,727,325.
- 3. The claims of parent U.S. Patent No. 6,727,325 differ from claims 6-9 of the instant application since the tetrakisphenol of formula (I) and the epoxy group-reactive compound is denoted as a clathrate which is specified as molecules of the guest compound (i.e. the epoxy groups-reactive compound) penetrating into the space in the crystalline lattice of the host compound (i.e. the tetrakisphenol) (specification, page 12, lines 14-17).

Application/Control Number: 10/717,871 Page 3

Art Unit: 1712

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent No. 5-105739 or Koike et al. Patent No. 5,157,165 or Schreiber Patent No. 4,668,718 or the abstract for Japanese Patent No. 7-74260.

- 4. Japanese '739 (Patent Abstracts of Japan and the translation, page 4, paragraph 18), Koike et al. (col. 2, lines 25-26; col. 3, lines 54-68, formula (2); col. 5, lines 54-57; col. 6, lines 39-41), Schreiber (col. 1, lines 25-35; col. 3, lines 6 and 14-15; col. 5, lines 30-34, Curing agent B and the cols. 7-8 table, Moulding composition 4) and Japanese '260 set forth an epoxy resin composition and its method of curing by mixing an epoxy resin, a tetrakisphenolethane and a hardening accelerator or other hardener (Japanese '260) such as the elected species of 2-ethyl-4-methyl imidazole (Koike et al. and Schreiber).
- 5. The calculated level of tetrakisphenolethane in Japanese '739 based on 100 parts by weight if biphenyl diglycidyl ether and 20 parts by weight of tetrakisphenolethane is 0.18 mole of tetrakisphenolethane per mole of biphenyl diglycidyl ether. Koike et al. (col. 6, lines 25-28) reports from 0.5 to 2 moles of phenolic hydroxyl group per mole of epoxy group of the epoxy resin. Both ranges lie outside of the limits of claims 7 and 9 of from 0.001 to 0.1 mole of tetrakisphenol compound per mole of epoxy group.

Application/Control Number: 10/717,871 Page 4

Art Unit: 1712

6. Japanese Patent No. 7-74260 B as well as Japanese Patent No. 2501154 B was provided in parent application no. 09/331,829. However, a search for these application numbers yielded patents with different subject matter from that set forth in the abstracts. The submission of the Japanese patent corresponding to the subject matter espoused in the abstracts along with any abstracts would clarify the record with respect to a matching of the proper patent numbers with the relevant subject matter.

Claims 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Zupancic et al. Patent No. 5,534,565.

7. Zupancic et al. in column 23, Example 39 shows 1073.7 grams of a diglycidyl ether of bisphenol A blended with tetrabromobisphenol A, 32.5 grams of tetraphenolethane and 2-methylmidazole (The elected species of 2-ethyl-4-imidazole is also suitable according to column 5, line 33.). The 1073.7 grams of the epoxy resin converts to 2.95 moles (1073.7 grams per 364 grams/mole of the diglycidyl ether of bisphenol A, wherein the 364 grams is obtained from 182 grams per epoxy equivalent x 2 epoxy equivalents/mole = 364 grams/mole). The 32.5 grams of tetraphenolethane yields 0.08 mole (32.5 grams per 398 grams/mole of the tetraphenolethane). Thus the molar ratio of tetraphenolethane to diglycidyl ether of bisphenol A is 0.08 to 2.95, or 0.07 to 1 which is within the limits of from 0.001:1 to 0.1:1 of claims 7 and 9.

Art Unit: 1712

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

European Patent No. 304-125 and Japanese Patent No. 7-76538 have been previously cited in parent application no. 09/331,829 and are not more relevant than the references applied hereinabove.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

Robert Sellers Primary Examiner Art Unit 1712